

W074

Updates on the *Musa acuminata* Reference Genome Sequence

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Time: 12:10 PM

Room: Pacific Salon 6-7 (2nd Floor)

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Since the release of the Banana (*Musa acuminata* DH Pahang) sequence in July 2012, significant progresses were made to improve the quality of this reference sequence as well as the access to this information. This presentation intends to give an update on the status of the sequence assembly and gene annotation as well as the information systems that handle those data.

An improved version of the assembly was produced (Martin et al *in Prep.*). The total scaffold number was reduced of 79% (7513 vs 1532), with a N50 that increased from 1.3Mb (65 scaffolds) to 3.0 Mb (26 scaffolds). Unknown sites (N) were reduced from 17.3% to 10.0%. Finally 89.5% of assembly was anchored to the 11 chromosomes compared to the previous 70%. The unanchored sequences represent now 46.5 Mb compare to 140.4 Mb before.

For the gene annotation, a new release of annotation is in progress that have been mapped on the assembly v2 and will take advantage of improvements coming from manual curation (~ 2,000 genes out of the 36,542) and NCBI RefSeq released in October 2014.

Finally, an overview of the new version of the Banana Genome Hub (Droc et al, 2013) will be presented. It includes additional features like JBrowse, a chromosome Browser and is being linked to the resources genetics being genotyped by Next Generation Genotyping and accessible via the Musa Germplasm Information System (MGIS)

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Meeting Information

When:
January 10 - 14, 2015
Where:
San Diego, CA